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#### PATENT SPECIFICATION

Application Date: Nov. 27, 1935. No. 32880/35.

457,953

Complete Specification Left: July 29, 1936.

Complete Specification Accepted: Dec. 9, 1936.

#### PROVISIONAL SPECIFICATION

#### An Improved Method of Producing Decorative Designs on Glass

We, John Charles Corsan, a British Subject, and The London Sand Blast Decorative Glass Works Limited, a British Company, both of Seager Place, 5 Burdett Road, London, E.3, do hereby declare the nature of this invention to be as follows:—

This invention for an improved method of producing decorative designs 10 on glass has for its object to enable artistic and pleasing decorative effects to be produced in a very simple and expeditious manner.

According to this invention the various
15 decorative designs are produced by laying the glass over a collocation of metal
rods or bars or other pattern forming
elements, and applying sufficient heat to
soften the glass so that impressions are
20 formed in the surface corresponding to
the pattern determined by the rods or
other pattern forming elements.

In one way of carrying out the invention a sheet of glass is placed on a collocation of iron rods or bars which are laid 25 on a level surface and arranged to form the pattern required. The glass is then heated until the glass is softened and sinks into the interstices formed between the bars. The required pattern is thus 30 impressed on the glass which is afterwards allowed to cool slowly.

Alternatively in place of rods or bars as described moulds are provided in which the pattern forming elements are located, 35 the glass being placed in position over the pattern forming elements and heated as previously described to take a decorative impression from the pattern forming elements in the mould.

Dated this 27th day of November. 1935. WHEATLEY & MACKENZIE. 40, Chancery Lane, London, W.C.2, Agents.

#### COMPLETE SPECIFICATION

#### An Improved Method of Producing Decorative Designs on Glass

We, John Charles Corsan, a British Subject, and The London Sand Blast Decorative Glass Works Limited, a British Company, both of Seager Place, 45 Burdett Road, London, E.3, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following state-

This invention for an improved method of producing decorative designs on glass has for its object to enable artistic and pleasing decorative effects to be 55 produced in a very simple and expedi-

tious manner.

It has previously been proposed in order to obtain a wavy, undulating or rippled effect throughout the thickness of 60 the glass, to place a plate or sheet of glass upon a bed having an irregular surface so arranged that the sheet or plate is supported upon a number of points or parts instead of upon its entire surface, 65 the glass being then subjected to heat under the influence of which the plate or

sheet becomes plastic and the unsupported parts sink to some extent.

According to this invention the various decorative designs are produced by laying the glass over a pattern forming element or a collocation of pattern forming elements such as rods, bars or metal strips, and applying sufficient heat to soften the glass so that impressions are 75 formed in the surface corresponding to the pattern determined by the pattern forming elements, the glass dropping under the force of gravity only.

In one way of carrying out the invention a sheet of glass is placed on a collocation of iron rods or bars which are laid on a level surface and arranged to form the pattern required. The glass is then heated until the glass is softened and 85 sinks into the interstices formed between the bars. The required pattern is thus impressed on the glass which is afterwards allowed to cool slowly.

Alternatively in place of rods or bars as 90

Alternatively in place of rods or bars as 9 described moulds are provided in which the pattern forming elements are located,

the glass being placed in position over the pattern forming elements and heated as previously described to take a decorative impression from the pattern forming 5 elements in the mould.

The invention will now be more particularly described with reference to the accompanying drawings wherein:—

Fig. 1 shows a set of T-bars in end 10 elevation arranged on the bed of a kiln. Fig. 2 is a perspective view of the Tbars according to Fig. 1.

Fig. 3 is a perspective view of a sheet of glass after it has been treated by the 15 process according to the invention.

Fig. 4 shows bent metal strips arranged in various patterns on the bed of a kiln.

In one way of carrying out the invention inverted T-bars 1 of iron or any other suitable material are arranged adjacent one another on the bed of a kiln 2, a sheet of glass is placed across the upturned edges of the inverted T-bars and heated. The glass is acted upon by 25 the force of gravity and drops in between the upturned edges of the bars forming by way of example corrugations as shown in Fig. 3. The T-bars can of course be of any length and their respective distances apart may be varied according to the desired pitch of the corrugations, i.e. if the space between the respective bars is increased, the drop of the glass between the bars is proportionately in-

In a modified form of the invention according to Fig. 4 bent metal strips 3 preferably of copper are used. These strips 3 which are of varying length are 40 bent into the required design and placed on edge on the bed of the kiln. This can be carried out by the artist himself and has the advantage of enabling the artist to work direct on his designs.

5 A sheet of glass is laid across the top of these strips 3 and heated and as before the glass will drop into the desired pattern under the force of gravity.

Care must be taken to allow the air to 50 escape from under the glass and this may be done by inserting metal tubes, forming venting apertures in the copper strips themselves or by venting the confined spaces under the glass in any other suit-55 able manner.

It will be understood that the preceding description refers to two ways of carrying out the invention, by way of

example only, and that various other shape forming pieces may be used or the two described may be combined. The metal strips can of course be bent into innumerable shapes such for example as furturistic figures, profiles, letters, numerals and the like and the T-bars can be arranged as desired.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed we declare that what we claim is:—

1. A method of producing decorative designs on glass characterised in that the glass is laid over a pattern forming element or a collocation of elements such as rods, bars or metal strips and sufficient heat applied thereto to soften the glass so that impressions are formed in the surface corresponding to the pattern determined by the pattern forming elements, 80 the glass dropping under the force of gravity only.

2. A method of producing decorative designs on glass as claimed in claim 1 characterised in that the pattern forming elements are composed of inverted T-bars of iron or the like.

3. A method of producing decorative designs on glass as claimed in claim 1 characterised in that the pattern forming elements are composed of thin metal strips preferably of copper.

4. A method of producing decorative designs on glass as claimed in claim 3 characterised in that the metal strips are stood on edge and bent to any desired

5. A method of producing decorative designs on glass as claimed in claim 4 characterised in that the metal strips are 100 formed with venting apertures for the egress of air from under the glass.

6. A method of producing decorative designs on glass as claimed in claim 3 characterised in that tubes or pipes are 105 provided for the egress of air from confined spaces under the glass.

7. The improved method of producing decorative designs on glass substantially as described with reference to the accom- 110 panying drawings.

Dated this 29th day of July, 1936. WHEATLEY & MACKENZIE, 40, Chancery Lane, London, W.C.2, Agents.

Learnington Spa: Printed for His Majesty's Stationery Office, by the Courier Press .- 1937.

Malby & Sons, Photo-Lith.

